RESPONSIVE AMENDMENT

In response to the Office Action dated January 17, 1996 (the period for response being extended to June 17, 1996), please amend the above-identified patent application as follows:

IN THE DRAWINGS

Please substitute proposed Figs. 1 and 2 for current Fig. 1 and 2. As required by the Examiner, Applicants have submitted proposed drawing changes adding the phrase "PRIOR ART" in red ink to Figs. 1 and 2. A separate letter to the draftsman has been prepared, a copy of which is attached for the Examiner's convenience.

IN THE CLAIMS

Please amend claims 8 and 22 as follows:

8. (Amended) A method for processing a plurality of discrete events in a processing system having at least one processor, each discrete event comprising a plurality of independent sub-events, said method comprising the steps of:

distributing each discrete event into one of a plurality of segments, each segment comprising a sequence of at least one discrete event to be processed;

initiating each of said plurality of segments to execute concurrently on said at least one processor;

for each segment, processing each discrete event contained within said segment sequentially; and

for each discrete event, processing each independent sub-event of said discrete event sequentially and then storing the results of said processing;

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wherein said step of distributing said discrete events comprises the steps of:

determining a number of processors designated for processing said discrete events;

setting the number of segments to equal the number of processors designated if a user override is not set;

setting the number of segments to equal a user selected number of segments if a user override is set; and

determining the number of discrete events to be processed;

allocating each of the discrete events into a segment; and

[The method of claim 7]

wherein said step of allocating said discrete events comprises the steps of:

dividing said number of discrete events by said number of segments to determine a segment size and a remainder;

selecting a number of segments equal to the remainder;

incrementing the segment size of each selected segment; and

distributing sequentially into each segment a number of discrete events equal to the segment size for each segment.

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22. (Amended) A system for processing a plurality of discrete events, each discrete event comprising a plurality of independent sub-events to be processed, comprising:

distributing means for distributing said plurality of discrete events into one of a plurality of segments, each segment comprising a sequence of at least one discrete event to be processed, said distributing means comprising:

means for determining the number of processors designated and available for processing the discrete events;

means for setting a number of segments to equal the number of processors if a user override is not set;

means for setting the number of segments to equal a user selected number of segments if a user override is set;

means for determining the number of discrete events to be processed; and

means for distributing each of said discrete events into one of said segments;

initiating means for initiating each of said plurality of segments at least one processor;

at least one processor for processing said plurality of discrete events by processing each discrete event with each segment sequentially and by processing each independent sub-event within each discrete event sequentially;

memory means for storing the processed discrete events; and

[The system of claim 21]

wherein said distributing means further comprises:

means for dividing said number of discrete events by said number of segments to determine a segment size for each segment and a remainder;

means for selecting a number of segments equal to said remainder;

means for incrementing the segment size of each selected segment; and